Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-32 (cancel).

Claim 33 (currently amended). A method for detecting the presence of a disease ~~that is expressing tenascin-C~~ in a biological tissue which may contain said disease, wherein said disease is characterized by the expression of tenascin-C in said tissue and wherein said disease is selected from the group consisting of cancer, psoriasis, and atherosclerosis, the method comprising:

~~a) identifying a nucleic acid ligand from a candidate mixture of nucleic acids, said nucleic acid ligand being a ligand of tenascin-C, by the method comprising~~

~~i) contacting a candidate mixture of nucleic acids with tenascin-C, wherein nucleic acids having an increased affinity to tenascin-C relative to the candidate mixture may be partitioned from the remainder of the candidate mixture;~~

~~ii) partitioning the increased affinity nucleic acids from the remainder of the candidate mixture;~~

~~iii) amplifying the increased affinity nucleic acids to yield a mixture of nucleic acids with relatively higher affinity and specificity for binding to tenascin-C, whereby a nucleic acid ligand of tenascin-C is identified;~~

~~b)~~ a) attaching a marker that can be used in *in vivo* diagnostics to ~~said~~ a tenascin-C nucleic acid ligand ~~identified in step iii)~~ to form a marker-nucleic acid ligand complex;

~~c)~~ b) exposing a said biological tissue which may contain said ~~tumor~~ disease to said marker-nucleic acid ligand complex; and

~~d)~~ c) detecting the presence of said marker-nucleic acid ligand in said tissue~~, whereby a said disease expressing tenascin-C is identified~~.

Claims 34-43 (cancel).

Claim 44 (new). The method of claim 33 wherein said marker is selected from the group consisting of radionuclides, fluorophores, magnetic compounds, and biotin.

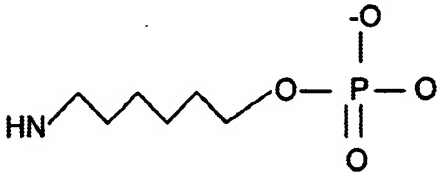
Claim 45 (new). The method of claim 44 wherein said radionuclide is selected from the group consisting of technetium-99m (Tc-99m), Re-188, Cu-64, Cu-67, F-18, ^{125}I, ^{131}I, ^{111}In, ^{32}P, and ^{186}Re.

Claim 46 (new). The method of claim 45 wherein said marker is technetium-99m.

Claim 47 (new). The method of claim 46 wherein said tenascin-C nucleic acid ligand comprises a linker.

Claim 48 (new). The method of claim 47 wherein said linker is $(CH_2CH_2O)_6$.

Claim 49 (new). The method of claim 47, wherein said linker has the structure



Claim 50 (new). The method of claim 47 wherein said tenascin-C nucleic acid ligand is selected from the group consisting of the sequences as set forth in Tables 3 and 4 and Figure 2 (SEQ ID NOS: 4-65).

Claim 51 (new). The method of claim 50 wherein said tenascin-C nucleic acid ligand is

5'-B-G667667CG-$(CH_2CH_2O)_6$-CGUCGCCGU77U667U6UUUU6CUCCCU65

wherein:

all pyrimidines are 2' F;

6= 2'OMe G;

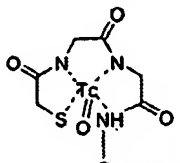
7= 2' OMe A;

5= 3'-3' dT; and

B= linker.

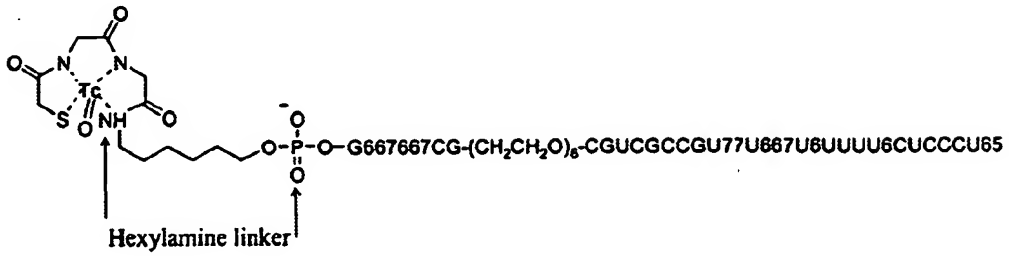
Claim 52 (new). The method of claim 51 wherein said technetium-99m is associated with a chelator.

Claim 53 (new). The method of claim 52, wherein said complex is

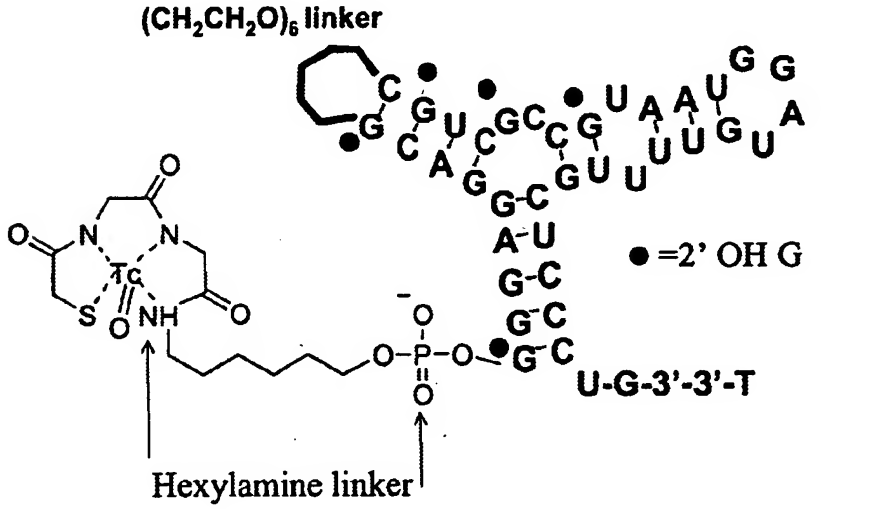


B-G667667CG-$(CH_2CH_2O)_6$-CGUCGCCGU77U667U6UUUU6CUCCCU65

Claim 54 (new). The method of claim 53 wherein said complex is



Claim 55 (new). The method of claim 54, wherein said complex is



All A's = 2'-OMe
All Gs, except as indicated, are 2'-OMe modified
All Cs are 2'-F modified
All Us are 2'-F modified

Claim 56 (new). The method of claim 33 further comprising attaching a therapeutic or diagnostic agent to said complex.

Claim 57 (new). The method of claim 33 wherein said disease is cancer.

Claim 58 (new). The method of claim 33 wherein said tenascin-C nucleic acid ligand is identified by:

i) contacting a candidate mixture of nucleic acids with tenascin-C wherein nucleic acids having an increased affinity to tenascin-C relative to the candidate mixture may be partitioned from the remainder of the candidate mixture;

ii) partitioning the increased affinity nucleic acids from the remainder of the candidate mixture;

iii) amplifying the increased affinity nucleic acids to yield a mixture of nucleic acids with relatively higher affinity and specificity for binding to tenascin-C, whereby a nucleic acid ligand of tenascin-C is identified.